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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,429	10/10/2003	Hee-Chul Han	Q76934	2133

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EXAMINER	
HARRISON, CHANTE E	
ART UNIT	**PAPER NUMBER**
2628	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/682,429	**Applicant(s)** HAN, HEE-CHUL	
	Examiner Chante Harrison	**Art Unit** 2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2007*.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-33* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on *10/10/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed on 4/11/07. This action is made FINAL.

2. Claims 1-33 are pending in the case. Claims 1, 7, 14, 21, 22, 23 and 28 are independent claims. Claims 21 and 22 have been amended. Claims 23-33 are newly added.

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claims 23 and 29 recite "the degrees of font transformation are set at **random**".

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-7, 9-17 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al., US 5,959,635, 9/1999.

As per independent claim 1, Watanabe discloses (a) receiving font data for a character (col. 5, ll. 6-10), and setting a ratio of font transformation (col. 10, ll. 5-10; col. 11, ll. 38-45); and

(b) transforming the font for the character (Fig. 1 "3c") by moving a set of transforming feature points of a plurality of feature points comprising the font data for the character downward, upward, to the left, or to the right (Fig. 4a-d), according to the set ratio of font transformation (col. 4, ll. 25-30; col. 10, ll. 5-10; col. 11, ll. 38-45), and outputting a result of the font transformation (col. 4, ll. 31-40; col. 5, ll. 15-20, 33-36), wherein the moving of the set of transforming feature points moves the transforming feature points from their usual positions within the character, thereby transforming a shape of the character (Fig. 4a-d).

Watanabe fails to specifically disclose setting a degree of font transformation.

It would have been obvious to one of ordinary skill in the art at the time of invention to include setting a degree of font transformation with the method of Watanabe because Watanabe discloses determining the amount of transformation as a portion or ratio of the font, where a portion or ratio specifies an amount or a degree of movement/transformation.

One of skill in the art would have been motivated to include setting the transformation to a percentage of the font size with the method of Watanabe for the advantage of regulating the amount of shape transformation.

As per dependent claim 2, Watanabe discloses the font is expressed using command codes (i.e. lines, circles, arcs or coordinates) at the plurality of feature points (col. 3, ll. 18-25; Fig. 3) and implementation functions forming at least one of a straight line and a curve connecting the plurality of feature points (Fig. 4 vector from point A to point C), and moving the set of transforming feature points of the plurality of feature points (Fig. 9) according to the set degree of font transformation (col. 10, ll. 5-10; col. 11, ll. 38-45).

As per dependent claim 3, Watanabe discloses the curve is a Bezier curve (col. 3, ll. 18-21; col. 5, ll. 58-60).

As per dependent claims 4, 26 and 32, Watanabe discloses the font is a vector font (col. 3,ll. 22-25, 30-32).

As per dependent claims 5, 27 and 33, Watanabe discloses the degree of font transformation is set to a predetermined portion of a font size of the font (col. 10, ll. 5-10; col. 11, ll. 38-45).

Watanabe fails to specifically disclose a percentage.

It would have been obvious to one of ordinary skill in the art at the time of invention to include setting the transformation to a percentage of the font size with the method of Watanabe because Watanabe discloses determining the amount of transformation as a portion of the font, where a portion or ratio is a part of the whole or a percentage.

One of skill in the art would have been motivated to include setting the transformation to a percentage of the font size with the method of Watanabe for the advantage of regulating the amount of shape transformation.

As per dependent claim 6, Watanabe discloses moving a first feature point of the set of transforming feature points of the plurality of feature points by a small amount of movement when a second feature point of the set of transforming feature points adjacent to the first feature point has a vector corresponding to the same quadrant as the vector of the first feature point (Fig. 9; col. 9, ll. 20-45), and in other cases, moving the first feature point by a large amount of movement (i.e. the amount of movement is determined by the ratio of the stroke length to the element width, such that the larger the distance between points the larger the movement) (col. 10, ll. 5-10).

As per independent claim 7, Watanabe discloses deciding whether to transform all instances of a plurality of instances of a character in a text by an identical degree of font transformation or to transform an instance of the plurality of instances of the character by a degree fo font transformation different from other instances of the plurality of instances (i.e. when a character code is input the control device performs a decision process that determines the transformation using the typeface conversion device, which determines the typeface code and applies a set transformation to the input if the polygons of the typeface are the same and a different transformation if the polygon and the typeface are not the same) (col. 6-7, ll. 45-32; col. 8-9, ll. 45-21). The rationale as applied in the rejection of claim 1 applies herein.

As per dependent claim 9, the rationale as applied in the rejection of claim 2 applies herein.

As per dependent claim 10, the rationale as applied in the rejection of claim 3 applies herein.

As per dependent claim 11 the rationale as applied in the rejection of claim 4 applies herein.

As per dependent claim 12, the rationale as applied in the rejection of claim 5 applies herein.

As per dependent claim 13, the rationale as applied in the rejection of claim 6 applies herein.

As per independent claim 14, Watanabe discloses an apparatus (Fig. 1) for implementing the method of claim 7. Therefore, the rationale as applied in the rejection of claim 7 applies herein

As per dependent claim 15, Watanabe discloses a font data input unit configured to receive font data to be displayed (col. 5, ll. 6-10, 20-22).

As per dependent claim 16, the rationale as applied in the rejection of claim 2 applies herein.

As per dependent claim 17, Watanabe discloses the font is a vector font (col. 3,ll. 22-25, 30-32), and the curve formed is a Bezier curve (col. 3, ll. 18-21; col. 5, ll. 58-60).

As per dependent claim 19, the rationale as applied in the rejection of claim 5 applies herein.

As per dependent claim 20, the rationale as applied in the rejection of claim 6 applies herein.

As per independent claim 21, Watanabe discloses computer readable medium (col. 5, ll. 10-20) for implementing the method of claim 1. Therefore, the rationale as applied in the rejection of claim 1 applies herein.

As per independent claim 22, Watanabe discloses computer readable medium (col. 5, ll. 10-20) for implementing the method of claim 7. Therefore, the rationale as applied in the rejection of claim 7 applies herein.

As per independent claim 23, the rationale as applied in the rejection of claim 7 applies herein. Examiner interprets setting the degree at random as setting various degrees of transformation.

As per dependent claims 24 and 30, Watanabe discloses moving a set of transforming feature points of a plurality of feature points... (Fig. 4a-d), according to the degree of font transformation (col. 4, ll. 25-30; col. 10, ll. 5-10; col. 11, ll. 38-45).

As per dependent claims 25 and 31, the rationale as applied in the rejection of claim 2 applies herein.

As per independent claim 28, the rationale as applied in the rejection of claim 7 applies herein.

As per dependent claim 29, the rationale as applied in the rejection of claim 23 applies herein.

2. Claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 4/13/07 have been fully considered but they are not persuasive. Applicant argues "a plurality of feature points comprising the font data for the character ([wherein the font data is previously received]).., wherein the moving of the set of transforming feature points moves the transforming feature points from their usual positions within the character, thereby transforming a shape of the character." as recited in claim 1.

In response, Watanabe (col. 3, ll. 36-38) teaches using the added control points and **the font data** to transform the contour shape and generate the character pattern, where character patterns of the same skeleton but different typefaces may be generated from the font data. Additionally, Watanabe (col. 6, ll. 5-30) teaches processing of font data (i.e. an outline font Fig. 2), where the outline font, e.g. font data, consists of a plurality of points (col. 6, ll. 15-20) and the contour of the font data is approximated by lines and curves (col. 6, ll. 35-40) that are processed to transform the character pattern. Watanabe also teaches transforming control points, e.g. feature points, of the font data, as he teaches altering the position of control points, e.g. A, A', B and B', to accommodate the addition of new control points, e.g. C', (col. 7, ll. 45-55) Therefore, Watanabe teaches feature points comprise font data for the character, where the feature points are transformed from their usual positions.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 571-272-7659. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chante Harrison
Examiner
Art Unit 2628

Ch
December 21, 2006

KEE M. TUNG
SUPERVISORY PATENT EXAMINER